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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,277	02/27/2002	Richard L. Petrovich	1109.0003 1178 EXAMINER	
26781	7590 08/10/2004			
BROUSE MCDOWELL INTELLECTUAL PROPERTY GROUP 500 FIRST NATIONAL TOWER			STAICOVICI, STEFAN	
			ART UNIT	PAPER NUMBER
AKRON, OH		,	1732	
			DATE MADECIN, 09/10/1004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/085,277	PETROVICH, RICHARD, L.				
Office Action Summary	Examiner	Art Unit				
	Stefan Staicovici	1732				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 20 M	ay 2004.					
	action is non-final.					
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
 4) Claim(s) 1-19 is/are pending in the application. 4a) Of the above claim(s) 1-12 and 17-19 is/are 5) Claim(s) is/are allowed. 6) Claim(s) 13-16 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or 	e withdrawn from consideration.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>2/27/02</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	🗖	ratent Application (PTO-152)				

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DETAILED ACTION

Specification

- 1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: "Venting Insert for Subsurface Venting or Injecting in Liquid Molding".
- 2. The abstract of the disclosure is objected to because the abstract should refer to the invention it pertains, hence it should refer to a venting insert. Correction is required. See MPEP § 608.01(b).

Election/Restrictions

3. Applicant's election without traverse of Group III, claims 13-16 in the reply filed on May 20, 2004 is acknowledged.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Louderback et al. (US Patent No. 5,885,513).

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Louderback *et al.* ('513) teach the claimed venting insert that is connected to a mold closure (30) including, an independent fed vent (46) that extends upwards from a circumferential resin track (S) formed an inner and outer liner (37a, 37b), a resin injection port (73) and a vacuum source to create suction (V2) (see col. 5, line 48 through col. 6, line 11; col. 6, lines 24-35 and Figure 4).

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClure et al. (US Patent No. 6,090,335) in view of RTM Paper (Brigham Young University).

McClure et al. ('335) teach the basic claimed insert (44) including, an injection port (40), a circumferential resin track formed by a plurality of holes (48) about said insert (44) and a vacuum source (34) (see Figures 2 and 5).

Regarding claims 13-15, although McClure et al. ('335) teach a vacuum vent, McClure et al. ('335) does not teach an independent vent that extends upwardly from the resin track. RTM Paper (Brigham Young University) teaches that in a typical RTM process a vent sprue extends upwards from a resin track (see Figure 1). Therefore, it

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would have been obvious for one of ordinary skill in the Art to have provided an independent vent that extends upwardly from the resin track as taught by RTM Paper (Brigham Young University) in the insert of McClure *et al.* ('335) because, an independent vent allows for improved process control of the resin flow front, hence decreasing wrinkles and forming an improved product.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Louderback *et al.* (US Patent No. 5,885,513) in view of Vallier (US Patent No. 5,226,997).

Louderback et al. ('513) teach the basic claimed venting insert as described above.

Regarding claim 16, although Louderback *et al.* ('513) teach joining (sealing) the mold closure (30) to the outer sleeve (37a) and the inner sleeve (37b) the venting insert using mechanical fastening, Louderback *et al.* ('513) do not specifically teach an O-ring for sealing. However, the use of O-rings as a mechanical sealant is well known in the art as evidenced by Vallier ('997) who teaches the use of O-rings for maintaining an air tight seal (see col. 5, lines 3-9). Therefore, it would have been obvious for one of ordinary skill in the art to have provided an O-ring as taught by Vallier ('997) as a mechanical fastener to seal the insert of Louderback *et al.* ('513) to the mold closure because, Louderback *et al.* ('513) suggests the use of mechanical fastening, whereas Vallier ('997) specifies the use of O-rings for maintaining an air tight seal, hence providing for an improved product and also providing the means for maintaining a vacuum seal in order for the insert of

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Louderback et al. ('513) to function as described. It is submitted that an O-ring is a mechanical sealant.

Conclusion

- 9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (571) 272-1208. The examiner can normally be reached on Monday-Friday 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni, can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.

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Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stefan Staicovici, PhD

Sker Speiconci 8/6/04 Primary Examiner

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August 6, 2004